WHAT IS CLAIMED IS:

- 1. A medical device comprising a needle hub having a flashback chamber formed therein, a vent plug covering said flashback chamber, said vent plug being formed from a material that permits a flow of air therethrough while preventing a flow of liquid therethrough, at least one of said hub and said vent plug being formed from a material that is at least partly transparent, at least one cannula having proximal and distal ends disposed externally of said hub, said cannula having a lumen communicating with said flashback chamber, a safety shield telescoped over at least part of said cannula and movable from a proximal position where said distal end of said cannula is exposed to a distal position where said distal end of said cannula is shielded.
- 2. The medical device of Claim 1, wherein said at least one cannula comprises proximal and distal cannulas spaced from one another in said flashback chamber.
- 3. The medical device of Claim 1, wherein said vent plug is formed from a resin material with a plurality of micro-pores providing communication between said flashback chamber and ambient surroundings, said micro-pores being dimensioned to permit a flow of air across said vent plug while preventing a flow of liquid across said vent plug.
 - 4. The medical device of Claim 1, wherein said hub is molded from a translucent resin.
 - 5. The medical device of Claim 1, wherein said hub is molded from a transparent resin.
- 6. The medical device of Claim 1, wherein said vent plug is molded from a translucent resin.
- 7. The medical device of Claim 1, wherein said vent plug is molded from a transparent resin.

- 8. The medical device of Claim 1, further comprising an actuator for releasing said safety shield from said proximal position and permitting movement of said safety shield to said distal position.
- 9. The medical device of Claim 8, further comprising a spring disposed for biasing said safety shield toward said distal position.
- 10. The safety device of Claim 9, further comprising a holder mounted securely in proximity to said hub for substantially surrounding said proximal end of said cannula.
- 11. The medical device of Claim 10, wherein said holder is formed from a material that is at least partly transparent.
- 12. The needle assembly of Claim 11, wherein said actuator is accessible from a location interiorly of said holder, whereby insertion of a fluid collection tube into said holder moves said actuator for releasing said safety shield.

- 13. A blood collection device comprising: a needle hub having a flashback chamber formed therein, a vent plug covering said flashback chamber, said vent plug being formed from a material that permits a flow of air therethrough while preventing a flow of liquid therethrough, at least one of said hub and said vent plug being formed from a material that permits observation of fluids in said flashback chamber, a proximal cannula mounted to said hub and having a proximal end projecting proximally from said hub, said proximal cannula having a proximal lumen communicating with said flashback chamber, a distal cannula mounted to said hub and having a distal end projecting distally from said hub, said distal cannula having a distal lumen communicating with said flashback chamber, a holder mounted to said hub and at least partly surrounding said proximal end of said proximal cannula, a safety shield telescoped over at least part of said distal cannula and movable from a proximal position where said distal end of said cannula is exposed to a distal position where said distal end of said cannula is shielded, an actuator for holding said safety shield in said proximal position and for releasing said safety shield for movement to said distal position in response to insertion of a blood collection tube into said holder.
- 14. The blood collection device of Claim 13, further comprising a spring disposed for biasing said safety shield toward said distal position.
- 15. The blood collection device of Claim 14, wherein said holder is formed from a material that is at least partly transparent.

- 16. The blood collection device of Claim 13, wherein said actuator is accessible from a location interiorly of said holder, whereby insertion of a fluid collection tube into said holder moves said actuator for releasing said safety shield.
 - 17. A method for collecting a sample of blood, said method comprising:

attempting venous access with an intravenous cannula;

observing a flashback chamber in proximity to said intravenous cannula for visually detecting blood in said flashback chamber;

placing an evacuated tube in communication with said flashback chamber after said visual indication of venous access; and

triggering a safety shield with said evacuated tube while placing said evacuated tube in communication with said flashback chamber.

18. The method of Claim 17, wherein a non-patient cannula extends from said flashback chamber, said step of placing an evacuated tube in communication with said flashback chamber comprises placing said evacuated tube in communication with said non-patient cannula.